

Appl. No. 10/051,723
Atty. Docket No. 8487M
Amdt. dated 12/08/2003
Reply to Office Action of 08/08/2003
Customer No. 27752

REMARKS

Claims 1-6 and 9-22 are pending in the present application. An additional claims fee has been calculated as being due as set forth in the transmittal form for this Amendment.

Claims 7 and 8 are canceled without prejudice.

Claim 1 has been amended to change R² to be C3-C9 alkyl or C3-C9 alkenyl. Support for this amendment is found in paragraph [0017], on page 5 of the specification. Claim 1 has also been amended to require that the fiber have a diameter of about 50 micrometers or less. Support for this amendment can be found in paragraph [0053], on page 14 of the specification. Claim 1 has also been amended, without prejudice, to delete reference to Structure (III) as claimed in the originally presented claim.

Claims 9, 10 and 14 have been amended to now depend on newly added Claim 22 instead of canceled Claim 8.

Claim 11 has been amended to include the same limitations to the polyhydroxyalkanoate copolymer as claimed in currently amended Claim 1.

Claim 13 has been amended to now depend on newly added Claim 21 instead of canceled Claim 7.

Claims 17 and 18 have been amended to require that the fiber have a diameter of about 50 micrometers or less. Support for this amendment can be found in paragraph [0053], on page 14 of the specification.

New Claims 21 and 22 have been added. Claim 21 corresponds to canceled original Claim 7, rewritten in independent form. Claim 22 corresponds to canceled original Claim 8 rewritten in independent form.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

Rejection Under 35 USC 103(a)

Claims 1-20 have been rejected under 35 USC 103(a) as being unpatentable over Wnuk (US Patent 5,939,467) alone or in combination with Noda references US Patents 6,013,590 (Noda '590), 5,502,116 (Noda '116), and 5,489,470 (Noda '470). Applicants respectfully traverse this rejection for the reasons provided below.

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The cited references do not present a prima facie case of obviousness with respect to Claims 21, 22 (replacing Claims 7, 8), 9, 10, 13, 14, 16, and 18 because they do not specifically teach or disclose multicomponent fibers.

The cited references do not obviate Claim 1, 11, 17, and 18 as amended, or any of dependent claims 2, 3, 4, 5, 6, or 12 because they do not specifically teach or disclose a fiber comprising the combination of a PLA with a PHA, wherein the PHA is characterized by a second monomer unit (II) as now defined in the amended claim (or the specific copolymer of Claim 17 or 18), or wherein the fiber is further characterized by a diameter of about 50 micrometers or less. PHA polymers wherein R2 is C9 or less provide improved melt spinning, which is particularly important for fibers having small diameters, of about 50 micrometers or less, which are typically characterized by high draw down ratios during manufacture. Higher chain length monomer (ii) units, it has been found, are characterized by reduced dynamic shear loss modulus. This results in reduced ability to make narrow fibers at high draw down ratios due to an increased propensity of the polymer to snap during melt spinning.

Claims 1-16 have been rejected under 35 USC 103(a) as being unpatentable over Matsui et al. ("Matsui", US Patent 6,174,602). Applicants respectfully traverse this rejection and maintain that Matsui does not raise a prima facie case of obviousness because it does not disclose PHA's according to Applicants Structure (I) and (II) copolymers.

Conclusion

In light of the above remarks, it is requested that the Examiner reconsider and withdraw the rejection under 35 USC 103(a). Early and favorable action in the case is respectfully requested.

Applicants have made an earnest effort to place their application in proper form and to distinguish the invention as now claimed from the applied references. In view of the foregoing, Applicants respectfully request reconsideration of this application, entry of the amendments presented herein, and allowance of Claims 1-6 and 9-22.

Respectfully submitted,

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